TESTIMONY OF RANDY IWASE CHAIR, PUBLIC UTILITIES COMMISSION STATE OF HAWAII TO THE HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

MARCH 23, 2015 2:45 p.m.

MEASURE: S.B. No. 1050, S.D. 2, H.D.1 **TITLE:** RELATING TO ENERGY

Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

DESCRIPTION:

This measure requires the Public Utilities Commission ("Commission") to establish a community-based renewable energy ("CBRE") tariff or tariffs that will take effect no later than January 1, 2016. This measure sets forth some of the details, limitations, and requirements for the required CBRE tariff.

POSITION:

The Commission supports the intent of establishing tariff structures to enable new energy programs and offers the following comments and **proposed draft** for the Committee's consideration.

COMMENTS:

The Commission views the intent of this measure as consistent with the principles articulated in the Commission's white paper entitled, *Commission's Inclinations on the Future of Hawaii's Electric Utilities*. A properly implemented CBRE tariff has the ability to increase local renewable energy generation while improving customers' options to manage energy use. The Commission notes that a properly implemented CBRE tariff should maximize the use of cost-effective renewable resources and should address issues of cross-subsidy between the utility, participating ratepayers, and non-participating ratepayers.

S.B. No. 1050, S.D. 2, H.D.1 Page 2

The Commission finds this measure problematic, as currently drafted, and has produced a proposed draft ("PUC-DBEDT Proposed Draft" - **See attached**), in collaboration with the Department of Business, Economic Development, and Tourism, for amendments to that we feel will allow for the timely implementation of a viable CBRE program.

The proposed draft directs the utility to collaborate with key stakeholders prior to filing a proposed CBRE tariff by October 1, 2015 rather than simply requiring the Commission to effectuate a CBRE tariff by January 1, 2016. The January 1, 2016 deadline is problematic as it may result in a poorly planned tariff or diversion of resources from other key matters currently before the Commission. Directing utilities to collaborate with key stakeholders prior to filing allows stakeholders to come to agreements or develop positions outside of the docket process. This method provides the fastest route to a viable CBRE tariff. A tariff that is filed by the utility can automatically take effect in 30 days if it goes unopposed. Stakeholders will still have the ability to oppose the tariff if they have concerns.

The proposed draft also leaves the Commission the discretion to set, revise, and modify the details of the program so that appropriate adjustments can be made to allow for the program to remain in the public interest.

The proposed draft also makes technical amendments for the purposes of clarity and consistency.

We hope you will consider our amendments.

Thank you for the opportunity to testify on this measure.

S.B. NO. PUC - DBEDT PROPOSED DRAFT

STATE OF HAWAII

A BILL FOR AN ACT

RELATING TO ENERGY.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. The legislature finds that all Hawaii residents should be able to participate in and enjoy the economic, environmental, and societal benefits of renewable energy. Spurred by the Hawaii clean energy initiative and increasingly affordable clean energy options, such as solar photovoltaic systems, localized renewable energy generation technology has become increasingly attainable.

While residential solar energy use has grown dramatically across the State in recent years, many residents and businesses are currently unable to directly participate in renewable energy generation because of their location, building type, access to the electric utility grid, or other impediments. The community-based renewable energy program seeks to rectify this inequity by dramatically expanding the market for eligible renewable energy resources to include residential and business renters, occupants of residential and commercial buildings with shaded or improperly

oriented roofs, and other groups who are unable to access the benefits of onsite clean energy generation.

The legislature finds that it is in the public interest to promote broader participation in self-generation by Hawaii residents and businesses through the development of community-based renewable energy facilities in which participants are entitled to generate electricity and receive credit for that electricity on their utility bills.

Community-based renewable energy creates new construction jobs, stimulates the economy, reduces emissions of greenhouse gases, promotes energy independence, and assists in meeting the State's clean energy goals. Further, community-based renewable energy enables residents and businesses to save money on their electricity bills, thereby providing additional funds for purchasing, investment, or other economic activity.

The purpose of this Act is to establish the Hawaii community-based renewable energy program to make the benefits of renewable energy generation more accessible to a greater number of Hawaii residents. The Legislature also finds that, in order to facilitate the timely implementation of community-based renewable energy, the electric utilities should collaborate with the department of business, economic development, and tourism, and other stakeholders from the renewable energy industry and environmental advocacy community on the development of a community-based renewable energy

tariff prior to filing the tariff with the public utilities commission.

SECTION 2. Chapter 269, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:

- "§269- Community-based renewable energy tariffs. (a) Each electric utility in the State of Hawaii shall file a proposed community-based renewable energy tariff with the public utilities commission by October 1, 2015. The public utilities commission shall establish a community-based renewable energy tariff if the tariff is found to be in the public interest and is not unduly discriminatory.
- (b) Subject to the community-based renewable energy tariff,

 any person or entity may participate in an eligible community-based

 renewable energy project.
- (c) As used in this section, "eligible community-based renewable energy project" means a project that:
 - (1) Is subject to a community based renewable energy tariff; and
 - (2) Generates or produces energy using one or more of the following sources:
 - (A) Wind;
 - (B) The sun;
 - (C) Falling water;

- (D) Biogas, including landfill and sewage-based digester gas;
- (E) Geothermal;
- (F) Ocean water, currents, and waves, including ocean thermal energy conversion;
- (G) Biomass, including biomass crops, agricultural and animal residues and wastes, and municipal solid waste and other solid waste;
- (H) Biofuels; and
- (I) Hydrogen produced from renewable energy sources.
- (d) As used in this section, "community-based renewable energy tariff" means a tariff approved by the commission that:
 - (1) Allows an electric utility customer to participate in an eligible renewable energy project that is providing electricity to the electric utility;
 - (2) Allows the electric utility to implement a billing arrangement to compensate those customers for the electricity provided to the electric utility;
 - (3) Is designed, to provide fair compensation for electric grid services and other benefits provided to or by the utility, participating ratepayers, and non-participating ratepayers; and

(4) To the extent possible, standardizes the related interconnection processes for community-based renewable energy projects.

SECTION 3. New statutory material is underscored.

SECTION 4. This Act shall take effect on July 1, 2015.



DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

LUIS P. SALAVERIA

MARY ALICE EVANS
DEPUTY DIRECTOR

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Statement of LUIS P. SALAVERIA

Director

Department of Business, Economic Development, and Tourism before the

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

Monday, March 23, 2015 2:45 p.m. State Capitol, Conference Room 325

in consideration of SB 1050, SD 2, HD 1 RELATING TO ENERGY.

Chair McKelvey, Vice Chair Woodson, and Members of the Committee.

The Department of Business, Economic Development & Tourism (DBEDT) supports SB 1050, SD 2, HD 1, with amendments as contained in the attached draft.

The measure requires the Public Utilities Commission (PUC) to establish a community-based renewable energy tariff or tariffs upon application by an electric utility or upon its own motion.

DBEDT views the concept of a community-based renewable energy tariff as an attractive option for increasing the penetration of renewable energy on Hawaii's electric grids in a reliable, cost-effective and equitable manner. By allowing utility customers to obtain partial interests in renewable projects that can be sited in optimal locations, and then crediting those customers for the energy provided to the grid on their utility bills, a community-based renewable energy tariff creates an efficient mechanism for broadening and deepening the benefits of clean energy to Hawaii's residents. Moreover, we view the potential use of financing from the Green Energy Market Securitization (GEMS) program with the community-based renewable energy tariff as a viable option to expand access to under-served market segments.

In the interest of passing a bill this session, DBEDT worked collaboratively with the PUC and other stakeholders on the attached draft. By requiring the utility to submit a tariff proposal by a certain date, and calling upon the utility to collaborate with DBEDT and other stakeholders in the

tariff's design and development, we believe this draft offers a viable and inclusive pathway toward creating a successful community-based renewable energy program that is aligned with Hawaii's energy policy priorities.

Finally, in prior testimony on this measure, DBEDT recommended including a statutory requirement to ensure against cross-subsidies or cost-shifting. We also identified a potential issue whereby participation in a community-based renewable energy project would be characterized as a security interest for the purpose federal securities law. After conducting further research, we believe that the attached draft provides the PUC sufficient latitude and context to effectively address these matters, if necessary, as part of the tariff proceeding.

Thank you for the opportunity to offer these comments regarding SB 1050, SD 2, HD 1.

S.B. NO. PUC-DRED

1050 PUC -DBEDT PROPOSED DRAFT

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While residential solar energy use has grown dramatically across the State in recent years, many residents and businesses are currently unable to directly participate in renewable energy generation because of their location, building type, access to the electric utility grid, or other impediments. The community-based renewable energy program seeks to rectify this inequity by dramatically expanding the market for eligible renewable energy resources to include residential and business renters, occupants of residential and commercial buildings with shaded or improperly

oriented roofs, and other groups who are unable to access the benefits of onsite clean energy generation.

The legislature finds that it is in the public interest to promote broader participation in self-generation by Hawaii residents and businesses through the development of community-based renewable energy facilities in which participants are entitled to generate electricity and receive credit for that electricity on their utility bills.

Community-based renewable energy creates new construction jobs, stimulates the economy, reduces emissions of greenhouse gases, promotes energy independence, and assists in meeting the State's clean energy goals. Further, community-based renewable energy enables residents and businesses to save money on their electricity bills, thereby providing additional funds for purchasing, investment, or other economic activity.

The purpose of this Act is to establish the Hawaii community-based renewable energy program to make the benefits of renewable energy generation more accessible to a greater number of Hawaii residents. The Legislature also finds that, in order to facilitate the timely implementation of community-based renewable energy, the electric utilities should collaborate with the Department of Business, Economic Development, and Tourism (DBEDT) and other stakeholders from the renewable energy industry and environmental advocacy community on the development of a community-based

renewable energy tariff prior to filing the tariff with the public utilities commission.

SECTION 2. Chapter 269, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:

- electric utility in the State of Hawaii shall file a proposed community-based renewable energy tariff with the public utilities commission by October 1, 2015. The public utilities commission shall establish a community-based renewable energy tariff if the tariff is found to be in the public interest and is not unduly discriminatory.
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 - (A) Wind;
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- (E) Geothermal;
- (F) Ocean water, currents, and waves, including ocean thermal energy conversion;
- (G) Biomass, including biomass crops, agricultural and animal residues and wastes, and municipal solid waste and other solid waste;
- (H) Biofuels; and
- (I) Hydrogen produced from renewable energy sources.
- (d) As used in this section, "community-based renewable energy tariff" means a tariff approved by the commission that:
 - (1) Allows an electric utility customer to participate in an eligible renewable energy project that is providing electricity to the electric utility;
 - (2) Allows the electric utility to implement a billing arrangement to compensate those customers for the electricity provided to the electric utility;
 - (3) Is designed, to provide fair compensation for electric grid services and other benefits provided to or by the utility, participating ratepayers, and non-participating ratepayers; and

(4) To the extent possible, standardizes the related interconnection processes for community-based renewable energy projects.

SECTION 3. New statutory material is underscored.

SECTION 4. This Act shall take effect on July 1, 2015.



SB1050 SD2 HD1 RELATING TO ENERGY

House Committee on Consumer Protection & Commerce

March 23, 2015 2:45 p.m. Room 325

The Office of Hawaiian Affairs (OHA) offers the following **COMMENTS** on SB1050 SD2 HD1, which establishes a community-based renewable energy framework, thereby expanding who can participate in the economic and environmental benefits associated with renewable energy.

By expanding who can participate in renewable energy generation projects, this bill will provide opportunities for more people to benefit from renewable energy-related cost savings. Currently, many households and businesses in Hawai'i are unable to benefit from the long-term cost savings associated with renewable energy. In some cases, the upfront costs are prohibitive, while in other cases, people may not own their own homes or business locations, or may live in condominiums. Despite having a labor force participation rate 4.5% higher than the statewide rate, Native Hawaiian families earn \$9,105 lower per-capita income than the state average, and thus are particularly less able to afford the up-front costs of participating in and benefiting from the current renewable energy distributed-generation market.

The framework established by SB1050 SD2 HD1 will also provide more of Hawai'i's residents, including Native Hawaiians, with the opportunity to help Hawai'i meet its clean energy goals, and reduce its dependence on imported fossil fuels. By adopting the targets of the Aloha+ Challenge, the state, including OHA, has committed to achieving the use of clean energy for 70% of our islands' energy needs by 2030. The principles underlying the Aloha+ Challenge support a renewed commitment to the sustainability practiced by our ancestors, and are perpetuated today through the traditional concept of mālama 'āina. The Aloha+ Challenge is embodied in the 'ōlelo noeau: "E mālama i ka 'āina i mohala i nā kānaka o ke kulāiwi" (When one cares and perpetuates and preserves the natural resources, the people shall thrive).

Mahalo for the opportunity to testify on this measure.



Email: communications@ulupono.com

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE Monday, March 23, 2015 — 2:45 p.m. — Room 325

Ulupono Initiative Strongly Supports SB 1050 SD 2 HD 1, Relating to Energy

Dear Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

My name is Murray Clay and I am Managing Partner of the Ulupono Initiative, a Hawaiʻi-based impact investment company that strives to improve the quality of life for the people of Hawaiʻi by working toward solutions that create more locally grown food, increase clean, renewable energy, and waste reduction. We believe that self-sufficiency is essential to our future prosperity, and will help shape a future where economic progress and mission-focused impact can work hand in hand.

Ulupono <u>strongly supports</u> **SB 1050 SD 2 HD 1**, which establishes a community-based renewable energy program, because it aligns with our goal of producing more clean, renewable energy in Hawai'i.

Ulupono would like to keep the current language in SB 1050 SD 2 HD 1 regarding cross-subsidy mitigation techniques (page 3, line 7 to page 4, line 9). The current language helps to mitigate concerns that solar projects will be tilted towards utility shareholders and is able to identify benefits that will help all ratepayers.

For example, if a community builds a 5 MW solar project for \$20 MM, and if that project reduces the utilities fuel costs, if the loss of revenues to cover the utilities fixed costs exceeded the fuel savings, then the project could be built under Section 269 (b). Without the current language in section 269 (b), the project above could not be built unless the utility did it. The current language allows all ratepayers to benefit and not just utility shareholders. The language would allow the Public Utilities Commission to obtain guidance from the Legislature to address these complex issues, without a prohibition on cross subsidies that can lead to unintended negative consequences.

We believe the intent of the Legislature is to allow all parties, the utility, independent power producers or communities of ratepayers to participate in, and benefit from, the efficiencies that the larger scale of community solar projects.



As imported fossil fuel prices have become more volatile, clean energy options like solar PV have become more economically attractive. Yet, to participate in the benefits of solar PV, a resident would need to have access to a roof with direct sunlight, access to the utility's grid, and be located in an area on the grid that can incorporate intermittent renewable energy. This leaves out many from participating, including renters and apartment dwellers. This bill creates a structure that would allow increased participation by residents and eventually maximize solar energy production throughout the grid.

Through increased renewable energy production, the State can be in a better position to meet its clean energy goals and obtain energy self-sufficiency. Community solar will stimulate the economy and create new jobs including many in the construction industry. Furthermore, solar PV is often the most recognizable clean energy source for the average person. If more people are better able to participate in solar energy production, the more aware they will be about the benefits of clean energy and this could create a more informed and supportive general public toward clean energy policies overall. This bill also allows the utility to obtain cost recovery for the transmission of electricity through its grid infrastructure.

As Hawai'i's energy issues become more complex and challenging, we appreciate this committee's efforts to look at policies that support renewable energy production.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay Managing Partner



Hawaii Solar Energy Association

Serving Hawaii Since 1977

Before House Committee on Consumer Protection & Commerce Monday, March 23, 2015, 2:45 p.m., Room 325 SB 1050 SB 2 HD 1: Relating to Energy

Aloha Chair McKelvey, Vice Chair Woodson, and members of the Committee,

On behalf of the Hawaii Solar Energy Association (HSEA), I would like to testify in <u>support</u> for SB 1050 SD 2 HD 1, which establishes a community-based renewable energy program. HSEA is a non-profit trade organization that has been advocating for solar energy since 1977, with an emphasis on both solar hot water (SHW) and residential and small commercial distributed generation (PV). We currently represent 90 member companies, which employ thousands of local employees working in the solar industry. With 38 years of advocacy behind us, HSEA's goal is to work for a sustainable energy future for all of Hawaii.

Interest in renewable energy has grown exponentially but not all can directly benefit

The installation of rooftop PV has grown significantly since 2008, and Hawaii now boasts over 40,000 residential PV systems. However, not all residential customers can take advantage of having some or all of their power being generated from renewable energy for a variety of reasons. SB 1050 SD 2 would address this issue by making it possible for apartment dwellers and others to invest in renewable energy and pay for it directly through a community solar tariff on the electric bill, thus enabling more customers to invest in sustainable renewable energy and to benefit from a hedge against rising electric bills.

SB 1050 SD 2 HD 1would allow the utility or any third party to propose, own, or operate a community based project

SB 1050 SD 2 HD 1 also has the advantage of allowing either the utility or any third party to propose, own, or operate a community based project and still make use of the community solar tariff created by this legislation. This means that the power to create a community solar project would not rest solely with the utility, and this provision might even the playing field when it comes to project development and approval. This provision is in alignment with the PUC's inclinations in which the PUC states that the utility should move more in the direction of a wires company and leave development and generation to third parties.

HSEA supports DBEDT & PUC proposal to require the utility to submit an application

HSEA supports the proposal by DBEDT and the PUC to require the utility to submit an application for a tariff to the PUC, and to form a collaborative working group of all interested parties to help draft the application. As we all know, the PUC has a tremendous amount of work to accomplish right now, and the more the interested parties can do to provide the PUC with options for tariffs in an application the better are the chances that a community solar tariff will be put in place in a timely manner. HSEA therefor supports this proposed amendment by DBEDT and the PUC to SB 1050 SD 2 HD 1, and looks forward to the next step in the process.

HSEA has always advocated for maximizing all of our renewable energy resources, and the development of a community solar program would be a welcome step to diversifying our renewable portfolio.

Thank you for the opportunity to testify Leslie Cole-Brooks, Executive Director HSEA



Monday, March 23, 2015

Relating to Senate Bill 1050 House Draft 1 Testifying in Strong Support

Aloha, Chair McKelvey, Vice-Chair Woodson and Members of the House Committee on Consumer Protection and Commerce,

The Democratic Party of Hawaii **supports SB1050 SD2 HD1 Relating to Energy**, which requires the Public Utilities Commission to establish community-based a renewable energy tariff, or tariffs, to take effect by January 1, 2016 and defines a community-based energy tariff. The bill also provides that projects up to one megawatt are subject to streamlined and standardized interconnection approval processes established by the Public Utilities Commission and projects greater than one megawatt are subject to the Public Utility Commission's individualized review and approval.

Presently, many households and businesses in our islands are unable to enjoy the benefits of renewable energy. Though we believe costs for renewable energy options have been dropping, they are still quite high and unattainable for them. There are also those that may rent their homes or office spaces, or live in condominiums and who do not have any options available to them.

What's more, for those that do have the means to access renewable energy resources, like photovoltaic systems, the ability to install these systems has been hindered by very limited access to the electric grid, only certain neighborhoods are still allowed to do so.

By establishing a mechanism for community-based renewable energy, this bill allows everyone, not just those with right opportunity or financial means, to benefit from renewable energy.

For these reasons, we urge you to act favorably on this bill.

Mahalo for the opportunity to testify, The Legislation Committee of the Democratic Party of Hawaii



Testimony of Hawai'i Green Growth in Support of SB1050 SD2 HD1 Relating to Energy

House Committee on Consumer Protection and Commerce

23 March 2015, 2:45pm, Room 325

Audrey Newman Hawai'i Green Growth P.O. Box 535 Ho'olehua, Hawai'i 96729

Hawai'i Green Growth is a voluntary partnership of more than 60 state, county, federal, business, and non-governmental leaders from energy, food production, natural resources, waste reduction, planning, green jobs, and other sectors who have come together to support a shared statewide commitment and tangible actions toward sustainability and a model green economy.

Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee, Hawai'i Green Growth (HGG) strongly supports SB1050 SD2 HD1. This establishes the community-based renewable energy program, which allows the public utilities commission to establish a tariff that allows all electric utility customers to obtain an interest in a portion of an eligible renewable energy project that is providing electricity to the electric utility and receive compensation for the energy provided to the electric utility.

HGG supports a community-based renewable energy program that allows Hawai'i ratepayers to obtain an interest in renewable energy equipment, or otherwise benefit from renewables located anywhere on their island grid. HGG agrees that participants should receive credit on their electricity bill as determined by a tariff approved the Public Utilities Commission.

SB1050 SD2 HD1 is a clean energy priority that will help advance action on the *Aloha+ Challenge: A Culture of Sustainability – He Nohona 'Ae'oia*, a joint leadership commitment to achieve six sustainability targets by 2030 in the areas of clean energy, local food production, natural resource management, solid waste reduction, smart growth and climate resilience, green jobs and education. The *Aloha+ Challenge* was unanimously endorsed by the 2014 Legislature (SCR 69) and signed by Hawai'i's Governor, Mayors and Office of Hawaiian Affairs. It was also internationally recognized as a model of integrated sustainability at the UN Conference on Small Island Developing States in Samoa.

Mahalo nui for your consideration,

Audrey Newman

Senior Advisor, Hawai'i Green Growth (HGG)

Bringing leaders together to achieve sustainability in Hawai'i & be a model for a green economy http://www.hawaiigreengrowth.org



Testimony before the House Committee on Consumer Protection & Commerce March 23, 2015, 2:45 pm Conference Room 325 S.B. 1050 SD2 HD1– Relating to Energy

By Keiki-Pua Dancil, Ph.D.
Director, Business Strategy Development
Hawaiian Electric Company, Inc.

Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

My name is Keiki-Pua Dancil. I am Director of Business Strategy Development at Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric and its subsidiary utilities, Maui Electric and Hawaii Electric Light (collectively "Companies"). The Companies are in **strong support of community renewables**, however we have strong concerns about the current language in SB 1050 SD2 HD1 because it may have unintended consequences that would negatively affect non-participating customers.

Our vision is to deliver cost-effective, clean, reliable, and innovative energy services to our customers, creating meaningful benefits for Hawaii's economy and environment, and making Hawaii a leader in the nation's energy transformation. To drive our vision for Hawaii, we anchor our strategies in a set of common objectives; lowering customer bills 20 percent by 2030, increasing renewables in our generation portfolio, modernizing our grid, and expanding customer options.

We have the following guiding principles for a fair and sustainable community renewables program:

- <u>Access</u>: Expand options to more of our customers, meeting their ever-changing energy needs in a fair and sustainable manner. Community renewables will be one of a suite of products and services that allow us to tailor a package of solutions to address customers' energy needs.
 - A community renewables program is an option that will provide the benefits of renewable energy to those customers (participants) who either choose not to or do not have access to install renewables on their property.
 - As of December 2014, twelve percent of our customers have received the benefits of solar energy through our NEM program, which is only accessible to those with access to on-site generation. A community renewable program would be available to everyone with a utility bill that is not currently in the NEM program.
- <u>Fairness to ALL customers</u>: Develop community renewables in the most cost effective manner that benefits ALL customers, not just participants in the community renewables program and does not increase the net energy metering (NEM) cost shift. "
 - The most cost effective renewable energy would be developed in optimal locations to the electric system (interconnection), at scale, and areas with high solar irradiance or wind capacity. Collectively, optimizing size (economies of scale), capacity factor, and interconnection to the electric system ensures ALL customers will get the most benefit from renewables. iii

We learned that the PUC and DBEDT have proposed a draft for consideration; we are evaluating the proposed draft and look forward to working with the interested parties to move a community renewables program forward that will benefit all customers.

Thank you for the opportunity to testify.

ⁱ http://www.energy.gov/eere/sunshot/solar-market-pathways. Hawaiian Electric is a participating utility stakeholder in Solar Electric Power Association's (SEPA) Department Of Energy's Sun Shot Initiative grant to explore community solar business models and consumer demographics to develop more standardized program design options.

ii As of December 2014, the annualized total fixed cost shift was \$53MM, a \$15MM increase from December 2013.

http://www.hawaiianelectric.com/heco/ hidden Hidden/CorpComm/Hawaiian-Electric-sends-six-more-Oahu-solar-contracts-to-Public-Utilities-Commission-for-approval?cpsextcurrchannel=1 (average price of solar \$0.14/kWh).

woodson2-Rachel

From: mailinglist@capitol.hawaii.gov
Sent: Saturday, March 21, 2015 10:04 PM

To: CPCtestimony

Cc: amybrinker@mac.com

Subject: *Submitted testimony for SB1050 on Mar 23, 2015 14:45PM*

SB1050

Submitted on: 3/21/2015

Testimony for CPC on Mar 23, 2015 14:45PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Amy Brinker	Individual	Support	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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Directors

Jody Allione Project Development Consultant

Joe Boivin Hawaii Gas

Kelly King Pacific Biodiesel

Warren S. Bollmeier II WSB-Hawaii

TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

SB 1050 SD2 HD1, RELATING TO ENERGY

March 23, 2015

Chair McElvey, Vice-Chair Woodson and members of the Committee, I am Warren Bollmeier, testifying on behalf of the Hawaii Renewable Energy Alliance (HREA). HREA is an industry-based, nonprofit corporation in Hawaii established in 1995. Our mission is to support, through education and advocacy, the use of renewables for a sustainable, energy-efficient, environmentally-friendly, economically-sound future for Hawaii. One of our goals is to support appropriate policy changes in state and local government, the Public Utilities Commission and the electric utilities to encourage increased use of renewables in Hawaii.

The purposes of SB 1050 SD2 HD1 are to: (i) require the PUC to establish community-based renewable energy tariff or tariffs to take effect by January 1, 2016; (ii) define community-based renewable energy tariff; and (iii) provide that projects up to one megawatt are subject to streamlined and standardized interconnection approval processes established by PUC and projects greater than one megawatt are subject to PUC's individualized review and approval.

HREA **supports** the intent of this measure with the following comments and recommendations, including amendments as discussed below.

- Clean Energy Goals. In our opinion, we need to facilitate the installation and operation of community-based renewable systems to the greatest extent possible if we are to meet our clean energy goals. Such systems will provide an option to customers who have not able to install renewable systems due to lack space on or adequate renewable resources at their property.
- 2) <u>Discussion</u>. We offer the following friendly amendments, "highlighted in yellow" in the attachment for the committee's consideration:
 - a) <u>Section 1</u>: Per the attachment, we recommend deleting the language on "wheeling" (p.2,l:15-21) as we do not believe it is necessary for this measure.
 - b) <u>Section 2- Part 1</u>. Similarly, we recommend deleting the language regarding detailed considerations (p.3,l:11 to p.4,l.2).
 - c) <u>Section 2- Part 2</u>. Similarly, we recommend deleting a portion of sub-section (b), project sizes (p.4,l:4 to 9), leaving the following:
 - "(b) Any person or entity may propose, own or operate a community-based renewable energy project; subject to the commission's review and approval."
 - d) <u>Section 2- Part 3</u>. Finally, we recommend deleting the language regarding an electric utility (p.4,I:10-13) as the utility can be considered an "entity."

Please consider passing out this measure with our recommended amendments. Mahalo for this opportunity to testify.





LATE TESTIMONY

DAVID Y. IGE GOVERNOR

SHAN S. TSUTSUI

STATE OF HAWAII OFFICE OF THE DIRECTOR DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS

335 MERCHANT STREET, ROOM 310 P.O. Box 541 HONOLULU, HAWAII 96809

Phone Number: 586-2850 Fax Number: 586-2856 www.hawaii.gov/dcca CATHERINE P. AWAKUNI COLÓN

JO ANN M. UCHIDA TAKEUCHI

TO THE HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

THE TWENTY-EIGHTH LEGISLATURE REGULAR SESSION OF 2015

MONDAY, MARCH 23, 2015 2:45 p.m.

TESTIMONY OF JEFFREY T. ONO, EXECUTIVE DIRECTOR, DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF CONSUMER AFFAIRS AND COMMERCE, TO THE HONORABLE ANGUS L.K. McKELVEY, CHAIR, AND MEMBERS OF THE COMMITTEE

SENATE BILL NO. 1050, S.D. 2, H.D. 1 - RELATING TO ENERGY

DESCRIPTION:

This measure proposes to require the Public Utilities Commission ("PUC") to establish community-based renewable energy tariff or tariffs to take effect by January 1, 2016; define community-based renewable energy tariff; and provides that projects up to one megawatt are subject to streamlined and standardized interconnection approval processes established by PUC and projects greater than one megawatt are subject to PUC's individualized review and approval.

POSITION:

The Division of Consumer Advocacy supports this bill.

Senate Bill No. 1050, S.D. 2, H.D. 1 House Committee on Consumer Protection & Commerce Monday, March 23, 2015, 2:45 p.m. Page 2

COMMENTS:

Thus far, distributed renewable energy systems, such as solar photovoltaic ("PV") systems, have been largely limited to single-family homeowners. Renters have no incentive to make the capital investment for a PV system that will be owned by a landlord. Furthermore, high-rise apartment owners do not have sufficient roof space to benefit from solar PV. Therefore, a large segment of Hawaii's population has been locked out of the distributed generation market for a number of reasons, including economic reasons even with the new financing and leasing options available for rooftop solar PV systems. A properly designed community-based renewable energy program has the potential to provide significant energy cost-savings to this under-served market. It also opens up access to affordable renewable energy to schools and community organizations that might otherwise be unable to participate in renewable energy self-generation programs.

In establishing the appropriate tariff, the PUC should take the following into consideration:

 There should be no cross-subsidy by non-participants to fund any part of a community-based renewable energy program;

- Participants should receive a per kilowatt-hour credit on their electricity bills

based upon the cost of generation;

 Participants should be allowed access to capital through the Department of Business, Economic Development, and Tourism's Green Energy Market Securitization or "GEMS" program; and

The PUC should have the discretion to revise, modify, or cancel the program,
 if, at any time, the PUC determines that the program is not in the public's

interest.

Therefore, the Consumer Advocate supports this bill that would require the PUC to establish a community-based renewable energy tariff that would take effect no later than January 1, 2016.

Thank you for this opportunity to testify.







HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

March 23, 2015, 2:45 P.M.
Room 325
(Testimony is 10 pages long)

TESTIMONY IN STRONG SUPPORT OF SB 1050

Chair McKelvey, Vice-Chair Woodson, and members of the Committee:

The Blue Planet Foundation strongly supports SB 1050, establishing a community renewables program to make the benefits clean energy more equally accessible to all consumers. This measure would allow residents to obtain a beneficial interest in solar and wind energy systems—even if those systems are not sited on their property. After much deliberation by legislators and various parties (including issues addressed during prior legislative sessions), SB 1050 now represents legislation that can ensure this equity for consumers. We respectfully request that the committee pass the measure without further amendments.

SB 1050 makes renewable energy accessible for many Hawai'i residents, businesses, and agencies who cannot currently take advantage of energy cost savings available from solutions like rooftop solar photovoltaic energy. Community-based renewable energy boosts private investment in our green energy infrastructure while it maximizes the flexibility of our clean energy solutions. In doing so, it benefits all Hawai'i residents by reducing the amount of money we send out of the state to pay for imported fossil fuels.

To ensure that SB 1050 successfully delivers clean energy access, it must retain three key features.

First, SB 1050 should enable anyone (community, renewable developer, land or building owner, etc.) to propose a community renewables project, subject to technical interconnection rules. The program should not be limited to traditional, utility-scale projects individually negotiated with the electric utility. To allow community-scale projects, the process should be streamlined with standardized rules for interconnection and applicable rates. A streamlined process will truly enable the democratization of our renewable energy resources.

Second, the measure should directly establish a program and a timeline, to ensure that consumers are able to benefit from community renewables in the near term. The timeline is

critical, as condo-dwellers and others have waited years for a community renewables program. Federal tax credits for renewable energy are expected to scale back at the end of 2016. In the interest of equality for condo-dwellers and others who cannot place solar on their own roof, consumers urgently need this program in place by early 2016.

Finally, the bill should not preclude an electric utility from developing and implementing their own community renewables program—it should simply establish a framework for others to develop projects and broaden the competitive renewable landscape. As drafted, SB 1050 allows the program to accommodate both "utility-scale" projects and smaller "community-scale" projects. SB 1050, as

Public interest in this type of democratized community renewables program is rising. In recent days, the Honolulu Star-Advertiser has expressed a similar view: "Whichever vehicle [HB 484 or SB 1050] moves, it must allow these relatively small-scale projects to be developed by private individuals and groups, as well as by the power utility."

We also note particular support for the language included in SB 1050 that empowers the PUC to consider appropriate mechanisms to balance the interests of participating and non-participating ratepayers. As further described below, language currently in the House companion² bill: (i) is overly restrictive, (ii) would create barriers for Community Renewables programs designed to benefit lower-income ratepayers, and (iii) is inconsistent with the existing utility rate structure. As drafted, the bill defers to the PUC to balance the various issues.

Thank you for this opportunity to testify. For the reasons outlined above, and detailed below, Blue Planet Foundation strongly supports SB 1050. We respectfully request that the bill be passed without further amendments.

The following pages contain:

- Detailed testimony regarding various prior drafts of HB 484 and SB 1050, along with comments on changes proposed by Hawaiian Electric;
- An "FAQ" on community renewables;
- An editorial from Pacific Business News in favor of community renewables; and
- An editorial from the Honolulu Star-Advertiser in favor of community renewables.

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¹ Honolulu Star-Advertiser, State should seek ambitious energy goals, March 15, 2015.

² HB 484 HD 2, Section 2: "(b) In establishing the community-based renewable energy tariff or tariffs, the commission shall ensure that there shall be no cross-subsidy by or shifting of costs to non-participants to fund any part of the community-based renewable energy program."

DETAILED TESTIMONY ON SB 1050 SD2

Our current system leaves many Hawai'i households, businesses, and public agencies unable to directly participate in renewable energy

Many residents and businesses have been used solar power and other technologies to break free from energy costs being driven upward by fossil fuels. Unfortunately, many individuals and households are currently unable to directly participate in renewable energy because of their location, building type, access to the electric utility grid, or other impediments. For example, (a) it may be difficult for a single condominium owner to install solar panels, without a wider installation on behalf of the entire condominium; (b) it may be difficult for homeowners with shaded roofs to harness as much of the sun's energy as their neighbors; or (c) a homeowner may find that the utility is limiting the amount of energy from the homeowner's particular circuit.

All of these situations can be addressed with community-based renewable energy.

Community Renewables unlocks clean energy solutions, improves our economy, and benefits our electrical grid

Community Renewables allows residents to join together to find energy solutions. For example, several condominium owners in different buildings may collectively install solar panels in another location with spare rooftop capacity. Even larger communities can join together to install renewable energy in ways that are most effective and efficient for their particular community. Or public agencies, such as schools, colleges, universities, and local governments will have more flexibility to access renewable energy across their systems. The cost savings can benefit important educational programs, social services, and new hiring.

Community Renewables can also help make our energy system more robust, by evening out the distribution of renewable energy on the grid. For example, homeowners on a crowded circuit can install solar panels on another circuit, and receive the credit against their energy bill. By promoting renewable energy on under-utilized circuits, it can help the utility to operate our electrical system more effectively and efficiently. In addition to these benefits, group net metering creates new construction jobs, stimulates the economy, reduces emissions of greenhouse gases, promotes energy independence, and will assist in meeting and exceeding the state's clean energy goals.

Community Renewables can also empower new energy innovations. For example, a community electric vehicle charger could participate in the program, tying charging to the availability of 100% renewable energy generated elsewhere on the grid. The program can also become a catalyst for smart energy pricing, where the value of renewable energy changes as supply and demand change on the grid throughout the course of a day.

Ensuring Fairness for All Utility Customers

The promise of Community Renewables is that, if scaled up appropriately, it can provide <u>fair access</u> to clean power for all consumers. But this promise will only be realized if the program (i) promotes broad participation by many customers, (ii) invites innovation and competition from members of the community and clean energy companies, (iii) grows beyond the confines of the traditional utility business model, and (iii) takes a forward-looking view on how to value clean energy. A program that is too utility-centric would risk closing the door on competition from innovative and entrepreneurial solutions. A program limited to large utility-scale energy projects, each subject to individualized negotiation with the utility, and each potentially limited by a traditional utility business model, will struggle to achieve the promise of fair access for all. Consumers need a broad, open, program that encourages new innovations and utility business models.

Too often, the concept of "fairness" is shifted away from focusing on fair access for all consumers, and instead becomes about protecting utility revenues under the traditional business model. Many assume that large "cost shifts" from solar energy customers to non-solar energy customers are inevitable, even though Hawai'i does not yet have the benefit of an accounting that addresses all the costs <u>and</u> benefits of solar power. Hawai'i has not yet implemented a dynamic rate structure that would comprehensively capture all costs and benefits as they change over time, or that would encourage new utility revenue streams for promoting distributed power. Thus, public dialogue is narrowly focused on the utility's "lost revenues" rather than a comprehensive view of costs, benefits, and access for all consumers.³

The myth of a solar "cost shift" also ignores the fundamental fact that the regulated monopoly utility is built on "cross-subsidies" between customers. A regulated utility is intended to ensure

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³ In testimony on companion bill HB 484, the HECO Companies testified that "[a]s of December 2014, the annualized total fixed cost shift was \$53MM." It is unclear whether this "total fixed cost-shift" accounts for many benefits of distributed solar energy, such as reduced transmission losses, forfeited customer energy credits, reduced utility capital expenditures on renewable generation, or other potentially substantial benefits for participants and non-participants alike. Nor does it account for benefits that many ratepayers value, such as consumer choice and protecting our environment. A focus on lost utility revenues, rather than a total accounting of costs and benefits, cannot capture the state's energy policies. For example, if the HECO Companies analysis was applied to energy efficiency (which is functionally the same as solar generation that is used on-site at the same time it is generated) the utility might argue that efficiency is not "fair for ALL consumers." Plainly, energy policy favors efficiency. Just as energy policy favors clean energy.

that all customers receive <u>equal access to power</u>. But the cost of providing that power is not the same for all customers.

For example, the regulated utility rate structure does not charge rural residents more, even though the fixed costs of delivering energy a longer distance may be higher than in settings with higher population density.

In another example, the regulated utility rate structure allows commercial customers to pay lower rates than residential customers, while invoking a capacity charge or other mechanism. In contrast, residential customers pay higher rates but do not typically see differentiation based on their capacity demand. Thus, it is inevitable that some residential customers are providing a cross-subsidy to other residential customers. It is likely that commercial customers are providing a cross-subsidy to residential customers, or vice-versa.

And most-importantly, it is bad energy policy to zealously slam the door on "cross-subsidies" because it may be desirable to provide a cross-subsidy for low-income ratepayers. The cross-subsidy language inserted into companion bill HB 484 HD2 is too broad; it would prohibit this outcome in favor of low-income ratepayers.

In light of these important issues, consumers need more than a "fairness" sound bite. For these reasons, we strongly urge the committees to forward the bill without the "cross-subsidy" amendment in HB 484.

Problematic Amendments Proposed by the Hawaiian Electric Companies

In testimony submitted to the Senate Committee on Ways & Means, The Hawaiian Electric Companies proposed several changes to SB 1050. For the following reasons, we urge the Committee to reject these proposed changes:

• HECO proposed changes ("page 3 lines 12-21 and Page 4 lines 1-3") would disfavor lower-income ratepayers: The HECO Companies are lobbying in favor of the "no cross-subsidy" language in HB 484. As explained above, the "unintended consequence" of this language would be to make it impossible for Community Renewables to include special programs to benefit lower-income ratepayers. Moreover, this language is inconsistent with entire existing utility rate structure. The change proposed by HECO is poor policy, and should not be adopted. HECO also suggests that SB 1050's non-exclusive list of potential mechanisms for balancing the interests of participants and non-participants should not be adopted because those mechanisms should purportedly be addressed in a rate case. This legislation, if passed, will govern all future rate cases. Thus, HECO's argument actually favors the current language. The existing language in SB 1050 is preferable because it empowers the PUC to approve forward-thinking solutions.

- HECO's proposed changes ("page 4 lines 4-10" and "15-17") would favor utility-scale projects over community-scale projects: HECO is lobbying against a standardized and streamlined process for approving and interconnecting small Community Renewables projects. The result of eliminating a standardized process would be to make the program favor large-scale utility-centric projects over community scale projects. Fair access demands a streamlined process that favors customers and promotes the transactional feasibility of smaller projects. The existing language in SB 1050 is preferable because it empowers the PUC to prescribe standardized and streamlined processes for community-scale projects.
- HECO's proposed changes ("page 5 lines 1-5") would impose a vague and conflicting cost-effective standard. The language proposed by HECO would only allow Community Renewables projects to go forward if those projects allow the utility "to procure the most cost-effective renewable energy to benefit all customers." Although at first blush this standard seems favorable, the legislature has already issued a measured and rational cost-effectiveness mandate. H.R.S. § 269-6(b) states:

"In making determinations of the reasonableness of the costs of utility system capital improvements and operations, the commission shall explicitly consider, quantitatively or qualitatively, the effect of the State's reliance on fossil fuels on price volatility, export of funds for fuel imports, fuel supply reliability risk, and greenhouse gas emissions. The commission may determine that short-term costs or direct costs that are higher than alternatives relying more heavily on fossil fuels are reasonable, considering the impacts resulting from the use of fossil fuels."

The standard proposed by HECO's amendments would conflict with this existing legislative mandate. HECO's amendment would also impose an inflexible constraint on the PUC and Community Renewables customers, limiting the availability of the program even in the face of customer demand. The proposed language also incorrectly assumes that the utility would "procure" all energy generated by Community Renewables projects; but SB 1050 contemplates that the utility's role could be to receive compensation in exchange for managing and transmitting the energy, rather than "procuring" it. The existing draft is preferable because it allows the PUC to evaluate cost effectiveness under clear existing guidelines.

Community Renewables is an innovative solution that is already happening in at least ten other states, such as California, Colorado, Massachusetts, Washington, Maryland, and Maine.⁴ California calls it "shared renewables." Colorado and Minnesota call them "community solar gardens." Massachusetts calls it "neighborhood" metering. Washington D.C. calls it "community renewables." Under any name, this is a good idea, urgently needed in Hawaii.

We respectfully request that SB 1050 be forwarded for further consideration. Thank you for the opportunity to testify.

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⁴ The U.S. Dep't of Energy's National Renewable Energy Laboratory has reported on elements of these programs, http://www.nrel.gov/docs/fy11osti/49930.pdf.

Community-based renewable energy FAQ

Q: Why is community renewables necessary?

A: While solar has been an incredible success story in Hawai'i, the majority of residents simply cannot directly participate in renewable energy because of their lack of access to a suitable rooftop for solar, such as many of the 40% of residents who live in multi-unit housing such as condos, or those whose roofs are shaded or otherwise incapable of supporting solar. Community-based renewable energy allows residents to invest in and benefit from solar and wind energy systems—even if those systems weren't directly on their property. It's a matter of fairness and equality. Everyone should be able to participate in Hawai'i's clean energy future, not just those fortunate enough to have a big roof over their heads.

Q: What are the benefits of community renewables?

Aside from making Hawai'i's clean energy policies more equitable, community renewables can bring real economic value to those who need it the most. Under California's Multifamily Affordable Solar Housing program (established in 2008, with at least 7 MW installed, and 13 MW signed up), community renewables is estimated to save low-income households 30% on their electric bills.

Q: Is anyone else doing community renewables?

A: Yes, as of November 2010, utilities, public utility commissions, and communities in California, Florida, Arizona, Utah, Colorado, Washington, Vermont, Massachusetts, Maryland, and Maine had all taken steps to adopt innovative community renewables programs. According a report by the U.S. Dep't of Energy National Renewable Energy Laboratory (NREL), the Interstate Renewable Energy Council (IREC) examined "the various community solar approaches that have been implemented thus far," to develop "model" rules for community based renewable energy programs. These model rules could be used to develop a program for Hawai'i.

Q: Aren't there other approaches to solve the same problem of lack of access to renewable energy?

A: Yes, there are, such as a the potential for a utility-sponsored "green pricing" program. But this is not available in Hawai'i and there are no current plans to make such a program available. Moreover, a community-based renewable energy program would empower residents to take control of their energy situation with their own resources, leveraging the efficiency of efficiency of the market.

OUR VIEW

Solar gardens can make everyone a winner



A proven technology that is gaining popularity on the Mainland deserves some serious consideration here in Hawaii.

where the sun is part of our brand identity.

The concept is especially important on Oahu as we grow upward with high-rise condominium towers that offer their residents few options for renewable energy.

We're talking about community solar gardens, which enable businesses and residents to invest in renewable energy by subscribing to a solar electric array that is connected to the utility grid. Subscribers will then receive a credit on their electric bills.

Solar energy has been one of Hawaii's fastestgrowing industries during the past decade, helped in large part by federal and state tax credits. Even so, its market penetration is under 10 percent.

One of the problems is that approximately 40 percent of Hawaii residents live in multifamily households, many of them without enough roof space to accommodate renewable-energy equipment. There also are economic barriers in rental units where tenants would reap the benefits orbite had look a resident the eminment.

Community solar gardens would remove some of those barriers.

The Blue Planet Foundation, which introduced legislation last year, calls it a win-win-win proposition.

"Households everywhere can win by accessing affordable clean energy." the foundation says. "The utility wins by adding another tool to solve energy interconnection questions: And businesses win because they can access a market that has long been cut off."

Hawalian Electric Co. also likes the concept, according to spokesman Peter Rosegg.

"We are looking for a model for customers who want to invest in and benefit from solar PV but do not have the opportunity because they are high-rise residents, home renters or other reasons," he said. "The model should also offer potential lower cost renewable energy and economic benefits for all our customers, not just those investing in community solar or single family homeowners who can benefit from solar on their own roofs."

As one would expect, solar contractors also think it's a great idea. It would mean more business for them and expand solar's reach.

So, what's stopping us?

The Blue Planet Foundation's House Bill 1363 attracted some attention in the 2013 Legislature, but it was one of those complicated issues whose "time had not yet come." The foundation still submit a new draft this session.

We think the time has come to give community solar gardens serious attention. In our bid to rely more on renewable energy and less on fossil fuels, here's a concept that holds promise to move us in the right direction.

State should seek ambitious energy goals - Hawaii News - Honolulu Star-Advertiser

StarAdvertiser.com

State should seek ambitious energy goals

POSTED: 01:30 a.m. HST, Mar 15, 2015 LAST UPDATED: 04:38 a.m. HST, Mar 15, 2015

The concept of moving the goalposts isn't always a dodge of responsibilities. In the case of renewable energy, it's an acknowledgement that Hawaii can be more ambitious about producing its own clean energy, becoming more secure and economically stronger.

The Legislature and the state Public Utilities Commission are facing decision points concerning energy policy, all aimed at positioning Hawaii optimally to make the best use of its renewable energy riches.

The PUC has correctly resolved to decide on four outstanding dockets that would govern the utility's business approach toward expanding the penetration of clean energy on the power grid. These decisions — which would determine how customers are charged, how more rooftop solar can be deployed and other factors — are likely to take a year to 18 months, officials have said.

The onus is on state lawmakers to act before the PUC in authorizing the next set of goals. Ideally, the new aim would take Hawaii off imported fossil fuels entirely, as soon as it's possible without busting household budgets.

And action by legislators as well as the regulatory agency is essential in advance of any final deal by the Florida-based NextEra Inc. to merge with Hawaiian Electric Industries, as is being proposed. The expectations the state has for its electric utilities should be known to the principal players, both current and prospective.

At issue at the state Capitol are a few bills of interest, all of which deserve serious consideration and debate:

» House Bill 623, House Draft 2, is the proposal that has passed the House; the Senate Energy Committee has slated a hearing for 2:45 p.m. Tuesday in conference room 225.

This bill would update the Hawaii Clean Energy Initiative to achieve a state energy portfolio of 100 percent renewable energy by 2045. The original initiative goal included a 70 percent clean-energy benchmark, which by 2030 would be achieved through conservation and substitution of renewables for the fossil fuels that now dominate.

A similar bill, **Senate Bill 715, Senate Draft 2**, would push back the deadline to 2050; it has not been scheduled for a hearing.

» HB 484, HD 2, and its companion bill SB 1050, SD 2, would require the PUC to establish a "community-based renewable energy tariff" system, a means of allowing people who lack the means or opportunity to install their own photovoltaic panels to buy into a larger project and reap some of the energy savings solar PV systems enable.

Whichever vehicle moves, it must allow these relatively small-scale projects to be developed by private individuals and groups, as well as by the power utility.

Page 1 of 2 Mar 16, 2015 02:32:38AM MDT

» **HB 1504, HD 2**, would provide funds and direct the Legislative Reference Bureau to do a comparative study of various utility models, including those that are owned cooperatively or in the public sector.

It would also impose a cap on interconnection costs that the utility could recover through a surcharge. These are the expenses associated with connecting external electricity generators to its grid. The cap would be based on national averages.

The primary accelerator for all of this would be the 100 percent clean-energy legislation. Judging by the meteoric rate of adoption of clean energy in recent years, this goal should be more than aspirational. It should be within reach.

However, the utility is bound to act in the interest of ratepayers, so it's essential that enabling legislation have an "out clause" to keep costs manageable, meaning the costs that are passed through to ratepayers. Technology developments over time should present more affordable consumer options, and it's important that the PUC has the discretion to make adjustments to the goals.

Fortunately, both bills currently offer some needed flexibility. Allowances in the current law already are made for circumstances beyond the utility's control; added to the list of circumstances would be the inability to gamer enough renewable electrical energy to meet benchmarks "in a manner that is beneficial to Hawaii's economy in relation to comparable fossil fuel resources."

By almost every measure, getting Hawaii off imported fuel makes sense. It would reduce our carbon footprint at a time when concern about climate change is skyrocketing. It would keep more money in the local economy, as well. And if customers are ensured enough competition and choice, it gives ratepayers more control over their household budgets.

NextEra is positioned to become the dominant force in Hawaii's market, and it certainly has the capacity to increase green-energy generation. Additionally, the company can make liquefied natural gas potentially cheaper as a "bridge" fuel in the near term.

But before NextEra comes to town, decision makers must act promptly to set the renewable-energy bar where it should be: 100 percent.

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March 23, 2015, 2:45 P.M. Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050 SD2 HD1

Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

I support Community Solar as a means of sharing the benefits of this important means of renewable energy. HB 484 and SB 1050 bring fairness and equity by allowing residents to invest in off-site solar generation that can turn into direct reductions on their electricity bills.

Besides reducing carbon pollution, additional solar panel installations will create new construction jobs.

Respectfully Submitted,

Donna Ambrose 316 Ilihau St. Kailua, HI 96734 (808) 664-7861

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March 23, 2015, 2:45 P.M. Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050 SD2 HD1

Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

I strongly support HB 484. With each new solar panel, Hawaii gets cleaner and cheaper energy, but not everyone can put panels on their own roof. Please make community solar a priority so that everyone has access to solar power. Please pass this bill.

Laura Gray

March 23, 2015, 2:45 P.M. Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050 SD2 HD1

Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

Aloha. I installed PV panels 10 years ago (when it cost more) because I am truly afraid of climate change. Unfortunately, I don't produce enough to cover our use, and could never power an electric car. My neighbors old, tall coconut trees limit the amount of sun I have access to. The house is an illegal vacation rental and they are not open to cutting the trees. So, I want personal access to Community Solar to add to what I can produce at home. Please give me that opportunity.

Thank you, Lisa Marten

March 23, 2015, 2:45 P.M. Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050 SD2 HD1

Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

I strongly support HB484 and SB1050, the community-based renewable energy program. If if's feasible we should expand the market for eligible renewable energy resources to include residential and business renters, occupants of residential and commercial buildings with shaded or improperly oriented roofs, and other groups who are unable to access the benefits of onsite clean energy generation.

In this way participants are entitled to generate electricity and receive credit for that electricity on their utility bills.

This makes total sense in a place that has such ample sunshine.

Lois Crozer Kailua

March 23, 2015, 2:45 P.M. Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050 SD2 HD1

Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Sincerely,

Mattson C. Davis

March 23, 2015, 2:45 P.M. Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050 SD2 HD1

Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

My husband and I strongly support Senate Bill 1050 to establish a community renewables program for Hawaii that is open to all participants. This measure brings fairness and equity to access to renewable energy.

We have invested in solar panels on our home roof and are enjoying running our home on them AND driving our 2011 Nissan Leaf on sunshine for, usually, a monthly electric bill of \$18. We realize that we are privileged.

About 40% of Hawaii residents are currently unable to benefit from solar power because they live in condos or apartment buildings, they are renters, their home doesn't get enough sun exposure, or their home is on a saturated circuit. Community solar allows these residents to invest in off-site solar generation that can turn into direct reductions on their electricity bills.

Besides cost savings, this program would also create new construction jobs, stimulate the economy, reduce carbon pollution, and help end Hawaii's dependence on fossil fuels.

We believe everyone has the right to benefit from renewable energy. Please vote in favor of SB 1050 in its current form to enable community solar for all.

Mele Stokesberry Charles M. Carletta 51 Mano Drive, Kula, (Maui) HI 96790

3 13 15 Dear Legislators, - strongly support Community Solar (48484, 581050). solar power and love it! Unfortunat owner I rent space and cannot use solar power. By supporting Community Solar, everyone can access more solar power. Please pass these bills, 48484 and SB 1050. Aloha Brt Ras, MD pedialrician Reis Pedialnics 30 Auliler St, SOO Kailua, HI 96734

March 23, 2015, 2:45 P.M. Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050 SD2 HD1

Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

This letter is in support of the Community Solar Bill, SB 1050 / HB 484.

Four years ago I was fortunate enough to convert my entire household electricity use to solar energy. I drive an electric car which also runs purely on solar energy. I am a community physician. I enjoy the luxury of owning my own home, and an adequate income which allows me the ability to make a difference in the community and reduce the use of fossil fuels.

I am proud to say I work for Kaiser Permanente who also supports clean energy. A group who is mindful with hospital operations and design, incorporates solar power and provides electric vehicle chargers at the workplace. It not only makes good business sense, but is very forward thinking and demonstrates a commitment to a healthier environment.

It is brings me great joy to see this transformation of clean energy use spread throughout the community, but I also realize there are many people who are unable to benefit from solar power due to their residential circumstance or financial situation. This is why I support SB 1050 / HB 484, Community Solar.

Everyone should have the opportunity for solar power and renewable energy. Everyone should be able to feel good about reducing their fossil fuel use, eliminating the high cost of electricity and being a part of a community which hopes to reverse climate change. Individual households, schools, businesses, or other agencies should have to opportunity to create and share energy solutions and costs. Greater access is needed. Thoughtful planning and addressing the issues of crowded circuits and grid overload is needed. Community Solar is a way to begin to address these issues. This is why I am asking you to join me in support for SB 1050/HB 484 Community Solar

Sincerely Grateful,

Melissa Lawrence MD

March 23, 2015, 2:45 P.M. Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050 SD2 HD1

Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Best regards,

Miles Yoshimoto Project Developer

March 23, 2015, 2:45 P.M. Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050 SD2 HD1

Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

I strongly support Community Solar (HB 484, SB 1050). Like 97% of people in Hawaii, I favor more solar power. With each new solar panel, Hawaii gets cleaner and cheaper energy. But not everyone can put panels on their own roof. We need the legislature to make Community Solar a priority, so that everyone has access to more solar power. Please pass this bill. Power should be on the community's terms—not the utility's.

Sincerely, Reggie Salvador

March 23, 2015, 2:45 P.M. Room 325

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Sincerely, Rene' Julian

March 23, 2015, 2:45 P.M. Room 325

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Sincerely,

Ross M Kutsunai Alternate Energy Inc. 808-478-5631

March 23, 2015, 2:45 P.M. Room 325

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Sincerely, Roy Skaggs

March 23, 2015, 2:45 P.M. Room 325

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Tatyana E. Cerullo

March 23, 2015, 2:45 P.M. Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050 SD2 HD1

Dear Trusted Public Servants,

First of all, I thank you for your service to our great community, State, and Country. I am writing in <u>absolute support</u> of **SB 1050**, and, **HB 484**, <u>Community Solar</u>. As a very large portion of residents live in communities and this is a way in which we all can participate in the benefit.

Please support our community, and not to big business/PUCs.

You could effect this in our generation! It is the obvious and right thing to do. A sustainable, secure, and renewable local energy.

Please pass these bills.

Mahalo for your time, attention, energy, & service.

Aloha,

Vickie Fullard-Leo 579 Auwina Street Kailua, Hl 96734 (808) 262-5660; 389-2820

March 23, 2015, 2:45 P.M. Conference Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050, SD2, HD1

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Sincerely,

Ari Matsumura

March 23, 2015, 2:45 P.M. Conference Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050, SD2, HD1

Aloha Chair McKelvey, Vice Chair Woodson, and, Members of the Committee:

I strongly support House Bill 484 to establish a community renewables program for Hawaii that is open to all participants. This measure brings fairness and equity to access to renewable energy.

About 40% of Hawaii residents are currently unable to benefit from solar power because they live in condos or apartment buildings, they are renters, their home doesn't get enough sun exposure, or their home is on a saturated circuit. Community solar allows these residents to invest in off-site solar generation that can turn into direct reductions on their electricity bills.

Besides cost savings, this program would also create new construction jobs, stimulate the economy, reduce carbon pollution, and help end Hawaii's dependence on fossil fuels.

I believe everyone has the right to benefit from renewable energy. Please vote in favor of HB 484 in its current form to enable community solar for all.

Henry Chang

March 23, 2015, 2:45 P.M. Conference Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050, SD2, HD1

Aloha Chair McKelvey, Vice Chair Woodson, and, Members of the Committee:

I want legislators to hear from me so they understand that there is widespread support for community solar to help residents and businesses who are unable to put panels on their own roofs.

I strongly support House Bill 484 to establish a community renewables program for Hawaii that is open to all participants. This measure brings fairness and equity to access to renewable energy.

About 40% of Hawaii residents are currently unable to benefit from solar power because they live in condos or apartment buildings, they are renters, their home doesn't get enough sun exposure, or their home is on a saturated circuit. Community solar allows these residents to invest in off-site solar generation that can turn into direct reductions on their electricity bills.

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I believe everyone has the right to benefit from renewable energy. Please vote in favor of HB 484 in its current form to enable community solar for all.

Thank you

Jeff Barone~

March 23, 2015, 2:45 P.M. Conference Room 325

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Sincerely, Jeff Lum

March 23, 2015, 2:45 P.M. Conference Room 325

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Besides cost savings, this program would also create new construction jobs, stimulate the economy, reduce carbon pollution, and help end Hawaii's dependence on fossil fuels.

I believe everyone has the right to benefit from renewable energy. Please vote in favor of SB 1050 in its current form to enable community solar for all.

Jennie L Sine Thanks!

March 23, 2015, 2:45 P.M. Conference Room 325

TESTIMONY IN STRONG SUPPORT OF SB 1050, SD2, HD1

Aloha Chair McKelvey, Vice Chair Woodson, and, Members of the Committee:

As a condo dweller, I would hope that future legislation advances condo access to solar panals that help reduce the individual electric bills of resident and slow global warming.

Joan Larcom

March 23, 2015, 2:45 P.M. Conference Room 325

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Sincerely,

Janet Mac Neal, Hilo, HI (born in Honolulu)